Check List 5(1): 083–085, 2009.

ISSN: 1809-127X

## NOTES ON GEOGRAPHIC DISTRIBUTION

# Lepidoptera, Nymphalidae, Satyrinae, Cissia terrestris: First record from Costa Rica

José Joaquín Montero-Ramírez <sup>1</sup> José Fernando González-Maya <sup>2, 3</sup>

<sup>1</sup> Instituto Nacional de Biodiversidad. Santo Domingo, Heredia, Costa Rica. Apdo. 22-3310. E-mail: jmontero@inbio.ac.cr

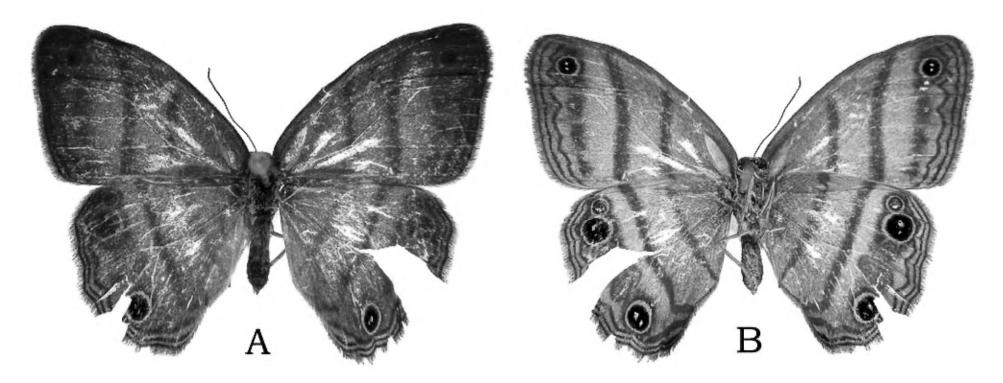
> <sup>2</sup> Proyecto de Conservación de Aguas y Tierras, ProCAT. Las Alturas, Coto Brus, Puntarenas, Costa Rica.

> > <sup>3</sup> ProCAT Colombia. Calle 127 b No. 45 - 76, Bogotá, Colombia.

The genus *Cissia* Doubleday, 1848, ranges from the southern United States throughout Mexico, Central and South America, and the West Indies and Trinidad (DeVries 1987). It contains 15 species (Lamas 2004), nine of which occur in Costa Rica. *Cissia terrestris* (Butler 1867) belongs to the tribe Satyrini, subtribe Euptychiina; and it is distinguished by the irregular metallic markings between the two largest hindwing ocelli and the single submarginal line on the hindwing tornus. The species is distributed from Nicaragua to the Brazilian Central Plateau (Motta 2002) and Distrito Federal in Central Brazil (Emery et al. 2006) with no current records from Costa Rica (DeVries 1987).

Here we report the first authentic Costa Rican record of *C. terrestris* (female, forewing length: 16,48 mm; Figure 1) collected during 13 months of sampling with three sets of baited traps which was carried out during the first eight days of every month from January 2005 to January 2006 for a total of 14.976 trap-hours. Each set consisted of six Van-Someren traps baited with fermented banana. Three traps were placed in the canopy and three in the understory (DeVries 1988).

The individual was collected on February 5 of 2005 in a canopy trap and was determined by using DeVries (1987). It is housed in the National Institute of Biodiversity (INBio) collection



**Figure 1**. Female *C. terrestris* collected during the study (forewing length 16,48 mm). a) Dorsal; b) Ventral

ISSN: 1809-127X

## NOTES ON GEOGRAPHIC DISTRIBUTION

(Voucher number: INB0004190857). The exact location of the site was 12°59'44.0" N, 83°30'56.5" W in an Open Forest (ITEC 2004) at 135 m elevation on the Pacific slope. The area represents a fragmented forest patch, located approximately less than 100 m from the forest

edge. The area is not part of any protected area (Figure 2) and is not under any management category. The only important feature around is that it is close to the spring water collecting tanks that provide the potable water for an entire town (Ciudad Puerto Cortes).

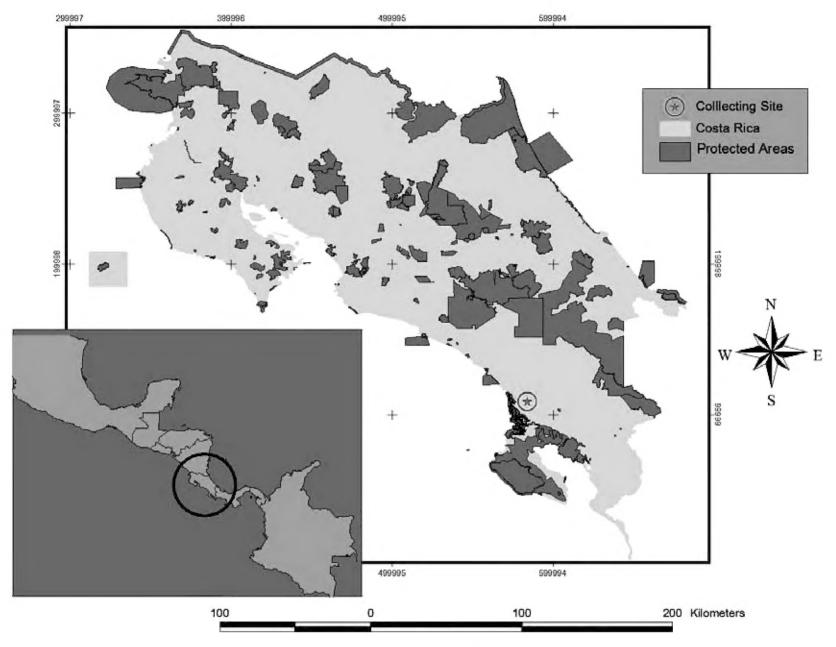


Figure 2. Collecting site and Costa Rican protected areas system.

Despite being expected to be present in the country based on collections from Nicaragua and David, Panama (DeVries 1987), this report is the first record of *C. terrestris* from Costa Rica. Multi-year efforts of sampling for the National Biodiversity Inventory carried out by INBio and other researchers collecting around the country

have not reported the species. Previous efforts have focused mainly on forested areas, protected areas and continuous forest patches, with little collecting and inventory efforts outside these areas. This report suggests extending collection and inventory efforts to fragmented and human-dominated landscapes.

#### Acknowledgements

To José Joaquín Montero Jiménez for his incredible field work and support. To INBio for the support of the entire project. Jim Lewis, Sarah Wyatt, Phil DeVries and André V. L. Freitas for their comments and review of the manuscript.

*Check List* **5**(1): 083–085, 2009.

ISSN: 1809-127X

# NOTES ON GEOGRAPHIC DISTRIBUTION

#### Literature cited

DeVries, P. J. 1987. The butterflies of Costa Rica and their natural history. Volume I: Papilionidae, Pieridae, Nymphalidae. New Jersey: Princeton University Press. 456 p.

DeVries, P. J. 1988. Stratification of fruit-feeding nymphalid butterflies in a Costa Rican rainforest. Journal of Research on the Lepidoptera 26(1-4): 98-108.

Emery, E. O., K. S. Brown Jr. and C. E. G. Pinheiro. 2006. As borboletas (Lepidoptera, Papilionoidea) do Distrito Federal, Brasil. Revista Brasileira de Entomologia 50(1): 85-92.

ITEC. 2004. Atlas de Costa Rica 2004. Cartago: Instituto Tecnológico de Costa Rica. CD.

Lamas, G. 2004. Euptychiina; p. 217-223 *In* G. Lamas (ed.), Atlas of the Neotropical Lepidoptera, Checklist: Vol. 5A, Part 4A, Hesperioidea-Papilionoidea. Florida: Scientific Publishers.

Motta, P. C. 2002. Butterflies from the Uberlândia region, Central Brazil: species list and biological comments. Brazilian Journal of Biology 62(1): 151-163.

Received February 2009 Accepted February 2009 Published online March 2009